

INSTRUCTIONS FOR SUBMISSION OF SMALL BUSINESS INNOVATION RESEARCH (SBIR) PHASE II PROPOSALS TO WRIGHT RESEARCH SITE, AIR FORCE RESEARCH LABORATORY

(As the result of Phase I awards made pursuant to DoD SBIR Program Solicitation 00.1)

I. INTRODUCTION

The Department Of Defense (DoD) SBIR Program Solicitation states that additional instructions regarding the preparation of Phase II proposals will be provided or made available by DOD components to all Phase I award winners. These instructions accomplish this for the Wright Research Site, Air Force Research Laboratory (additional information for proposals that are contemplating utilizing Fast Track Procedures is separately available.) You are highly encouraged to revisit the DoD SBIR Solicitation that resulted in your Phase I award to become reacquainted with requirements and elements common to both Phase I and Phase II procurements. **It is important and necessary to utilize the Forms and Certifications prescribed in Sections 3.6 and 9.0 of the DoD 00.1 SBIR Solicitation as instructed herein.**

These forms are available on the Internet. The Proposal Cover Sheet and Company Commercialization Report can be accessed at the following hyperlink: <http://www.dodsbir.net/submission>.

A Phase II proposal can be submitted only by a Phase I awardee and only at the request of the DoD Component. **You must qualify as a small business at the time of the contemplated Phase II award.** Phase I awardees that no longer meet the DoD SBIR solicitation "small business size status" requirements, definitions and qualifications are prohibited from receiving a Phase II award. **No unsolicited proposals will be accepted.** Although there is no requirement for a Phase II proposal to be submitted by Phase I awardees, such proposals can be submitted at any time when progress attained under Phase I is deemed sufficient to justify the effort to be proposed for Phase II, **but only upon receipt of a proposal request from the DoD Component.** Consistent with the Air Force Proposal Preparation Instructions (page AF-1 of the DoD SBIR Solicitation), the primary research effort, alone, is used to determine whether a Phase II proposal will be requested. Accordingly, it is possible (although highly unlikely) that a Phase II proposal could be submitted very early in the Phase I effort.

As a general rule, these instructions assume a minimum of three months of Phase I effort before the submission of a Phase II proposal. It is intended to invite submission of Phase II proposals within 6 months of the Phase I effort (pursuant to the DOD Solicitation, Air Force Proposal Preparation Instructions on page AF-1: "If requested the Phase II proposal must be submitted within six months from the start of Phase I to ensure that the proposal will be evaluated and is eligible for award"). A separate "letter request for proposal" will be issued to those Phase I Awardees being considered for a Phase II award. The actual proposal due date as contemplated above will be as set forth in the letter.

If a Phase II contract is awarded, the contractor shall be required to periodically update the commercialization results of the Phase II project through the Web Site at www.dodsbir.net/submission. Information to be reported is listed in Paragraph 5.4 of the DoD 00.1 SBIR Solicitation. These updates on the project will be required one year after the start of Phase II, at the completion of Phase II, and subsequently when the contractor submits a new SBIR or

STTR proposal to DoD. Firms that do not submit a new proposal to DoD will be asked to provide updates on an annual basis after the completion of Phase II.

II. PROPOSAL SUBMISSION

A Phase I awardee can (but is not required to) submit a Phase II proposal as a follow-on to the Phase I effort. The Phase II proposal should be submitted in five copies to the SBIR focal point in the office of the DoD Component responsible for the technical monitoring of the Phase I contract (the same office to which the Phase I proposal was submitted). Phase II is the principal research or research and development effort and is expected to produce a well defined deliverable prototype. The primary reason for submitting a Phase II proposal should be that the technical progress or results for Phase I have shown sufficient promise to the solution of an important scientific or engineering problem and a more extensive research or research and development effort is desired.

As contrasted to Phase I, Phase II proposals will require a more comprehensive submittal that outlines the proposed effort in detail. Phase II awards will be made to firms on the basis of results from the Phase I effort and the scientific, technical and commercial merit of the Phase II proposal. Phase II awards will typically cover two to five person-years of effort over a period generally not to exceed 24 months, subject to negotiation. Phase II awards are typically \$500K to \$750K. The number of Phase II awards will depend upon Phase I results, the quality of Phase II proposals and the availability of funds.

The DoD Component is not obligated to make any awards under Phase II (or Phase III). Additionally the DOD Component is not responsible for any monies expended by the proposer before award of any contract. All awards are subject to the availability of funds.

Phase II proposers feeling that their research or research and development has the potential to meet market needs, in addition to meeting DOD objectives, are encouraged to obtain non-federal follow-on funding to pursue Phase III (commercial application of the research or development). When several Phase II proposals are evaluated as being of approximately equal merit, cost to the DoD will be considered in determining the successful offeror(s).

One copy of the proposal must be an original signed by the principal investigator and an official empowered to commit the proposer. Other copies may be photocopied.

The name and address of the offeror, the original solicitation number and the topic number, and the **Phase I** contract number (including the fiscal year in which it was funded) for any Phase II proposal must be clearly marked on the face of the envelope or wrapper.

Mailed or handcarried proposals must be delivered to the SBIR focal point (the same office to which Phase I proposals were sent), or as directed by the Phase I contract / contracting officer (CO), per Section II herein. Secure packaging is mandatory. The DoD Component cannot be responsible for the processing of proposals damaged in transit.

III. PHASE II PROPOSAL PREPARATION INSTRUCTIONS AND REQUIREMENTS

A. Proposal Requirements

A Phase II proposal should provide sufficient information to persuade the DoD Component that the proposed continuation of work represents a likely solution to the scientific or engineering problem and is worthy of support under the stated criteria.

The proposal should be self-contained and written with care and thoroughness. Each proposal should be reviewed carefully by the offeror to ensure inclusion of all data essential for evaluation.

The quality of the scientific or technical content of the proposal will be the principal basis upon which proposals will be evaluated. The proposed research or research and development must be a logical continuation of the Phase I effort with the capability for technological innovation, new commercial products, processes, or services which benefit the public.

If a Phase II proposal is substantially the same as another proposal that has been funded, is now being funded, or is pending with another Federal agency or DOD component as a separate action, the proposer must so indicate on the Proposal Cover Sheet, and provide the information required by Section III.D.11 of this document.

B. Proprietary Information

If information is provided which constitutes a trade secret, proprietary, commercial, or financial information, confidential personal information, or data affecting the national security, it will be treated in confidence to the extent permitted by law, provided it is clearly marked in accordance with Section V.E. **However, you are advised that in the event of an award, it is likely that the "Phase II Work Plan" will be incorporated into the award, in whole or in part, either by insertion or by reference. You are therefore urged to insure that any information that is desired to be excluded from public release pursuant to the "Freedom of Information Act", be segregated from or within the "Work Plan".**

C. General Content

The SBIR Program is designed to reduce the investment of time and cost to small firms in preparing a formal proposal. Phase II proposers must submit a direct, concise, and informative research or research and development proposal (no type smaller than 12 pitch or 11 point on standard 8 1/2" x 11" paper) which includes the Proposal Cover Sheet, the Cost Proposal (see Reference A in the DoD 00.1 SBIR Solicitation), the Company Commercialization Report, and a two-page commercialization strategy (see paragraph 3.6 of the DoD Solicitation), as well as any required enclosures and attachments. A Certificate of Current Cost or Pricing Data should be submitted only if requested by the contracting officer. The maximum length for the proposal, including all attachments, enclosures, forms, reports, summaries and appendices is 75 pages. Promotional and non-project related items are discouraged. Cover all items listed below in the order given. The space allocated to each will depend on the problem chosen and the principal

investigator's approach. In the interest of equity, unnecessary attachments, appendices, or references will not be considered in proposal evaluation. In accordance with Executive Order 12873, dated 20 Oct 93, you are encouraged to submit your proposal printed/copied double-sided on recycled paper that has at least 20% post consumer material (if high-speed copier paper, offset paper, forms bond, computer printout paper and carbonless paper, 50% recovered material, with 20% post-consumer material if uncoated printing and writing paper, such as office paper, book paper, cotton fiber paper, and cover stock.

D. Proposal Format

All pages shall be consecutively numbered. Phase I results or anticipated results must be referenced as necessary and if useful.

1. Proposal Cover Sheet – Prepare this Cover Sheet as instructed on the password-protected DoD Electronic Submission Web Site (<http://www.dodsbir.net/submission>), including a brief technical abstract of the proposed R&D project and a discussion of anticipated benefits and potential commercial applications. If your proposal is selected for award, the technical abstract and discussion of anticipated benefits will be publicly released on the Internet; therefore, do not include proprietary or classified information in these sections. Print out a hard copy of the Proposal Cover Sheet from the Web Site and include it, with the appropriate signatures, as the first two pages of your proposal.

2. Identification and Significance of the Problem or Opportunity - Briefly reference the specific technical problem or opportunity addressed in Phase I and its relationship to Phase II (begin on page 3 of proposal).

3. Phase II Technical Objectives - Enumerate the specific objectives of the Phase II work, including any results from Phase I which clearly relate to the objectives. An assessment of likely success and of potential commercial application should be included for each objective.

4. Phase II Work Plan - This section must provide an explicit, detailed description of the Phase II approach. The plan should indicate not only what is planned, but how and where the effort will be carried out. Phase II efforts should attempt to accomplish the technical feasibility demonstrated in Phase I, including transition of results to the private sector. The methods to achieve each objective or task should be discussed explicitly and in detail. **However, see Section III B, "Proprietary Information", herein.**

This section should be the major portion of the total proposal and must clearly show advancement in the research appropriate for Phase II. Continuation of Phase I research (i.e., still attempting to determine the feasibility of an idea) is not appropriate for Phase II of the SBIR Program. If the Phase I results have not demonstrated or indicated the feasibility for a proposed concept or innovation, no further research for that particular effort will be awarded and therefore pursued under Phase II.

5. Related Work - Describe significant activities directly related to the proposed effort, including any conducted by the principal investigator, by the proposing firm, consultants, or others, and how it interfaces with the proposed project. This will also demonstrate how the proposal reflects the proposer's awareness of the state-of-the-art in the specific approach proposed for the scientific or engineering research involved.

6. Relationship with Future Research or Research and Development

(a) State the anticipated results of the proposed approach if the project is successful, specifically addressing any plan for Phase III.

(b) Discuss the significance of the Phase II effort in providing a foundation for the Phase III research or research and development effort.

7. Potential Applications and 2 page Commercialization Strategy - Briefly describe:

(a) Whether and by what means proposed results appear to have potential use by the Federal Government.

(b) Whether and by what means proposed results appear to have potential commercial application. The proposal must include the previously referenced two-page commercialization strategy, which addresses the following:

(1) What is the first product that this technology will go into?

(2) Who will be your customers, and what is your estimate of the market size?

(3) How much money will you need to bring the technology to market, and how will you raise that money?

(4) Does your company contain marketing expertise and, if not, how do you intend to bring that expertise into the company?

(5) Who are your competitors, and what is your price and/or quality advantage over your competitors?

The commercialization strategy must also include a schedule showing the quantitative commercialization results from the Phase II project that your company expects to report in its Company Commercialization Report Updates one year after the start of Phase II, at the completion of Phase II, and after the completion of Phase II (i.e., amount of additional investment, sales revenue, etc. – see items a through g in section 5.4 of the DoD Solicitation).

8. Key Personnel - Identify key personnel who will be involved in the Phase II effort, including information on directly related education and experience. A resume of the principal investigator, including a list of publications (if any) must be included.

9. Facilities/Equipment - Describe available instrumentation and physical facilities necessary to carry out the Phase II effort. Items of equipment to be purchased (as detailed in the Cost Proposal) shall be justified under this section.

10. Consultants - Involvement of university or other consultants in the planning and/or research stages of the project may be appropriate. If such involvement is intended, it should be

described in detail and included in the Cost Proposal (if appropriate). For Phase II, a minimum of one-half of the research and/or analytical effort must be performed by the proposing small business concern. The methodology by which this is measured should be verified with the Phase I contract award contracting officer during proposal preparation.

11. Current and Pending Support - If a proposal substantially the same as the one submitted has been previously funded or is either funded by, pending with, or about to be submitted to another Federal agency or another DOD component or to the Air Force in a separate action, the proposer must provide the following information:

(a) The name and address of the agency(s) or DOD component to which a proposal was submitted or will be submitted, or from which an award is expected or has been received.

(b) Date of proposal submission or date of award.

(c) Title of proposal.

(d) Name and title of principal investigator for each proposal submitted or award received.

(e) Title, number, and date of solicitation(s) under which the proposal was submitted or will be submitted, or under which an award is expected or has been received.

(f) If award was received, state contract number.

(g) Specify the applicable topics for each SBIR proposal submitted or award received.

If this section does not apply, state in the proposal, "No prior, current, or pending support for proposed work."

12. Cost Proposal - Complete and submit your cost proposal together with supporting documentation and breakdowns following the applicable elements set forth in Reference A in the DoD 00.1 SBIR Solicitation (<http://www.acq.osd.mil/sadbu/sbir/001/refa.pdf>). Under the direct labor category, list all key personnel by name, as well as by number of hours dedicated to the project (see also the Cost Section of the DoD SBIR Program Solicitation). Submit a Certificate of Current Cost or Pricing Data only if and when directed by the contracting officer.

A firm-fixed price, cost or cost-plus fixed fee Phase II proposal must be submitted in detail in the format indicated above. Some items therein may not apply to the proposed project each and every time. What matters is that enough information be provided to allow the DoD Component to understand how the proposer plans to use the requested funds if the contract is awarded. The contracting officer may consider other types of contracts. A cost or cost-plus fixed fee type proposal is preferred for Phase II, unless previously discussed and/or otherwise indicated or agreed to by the government contracting officer who awarded Phase I. Phase II contracts may include a profit or fee.

(a) Special Tooling, Test Equipment and/or Material

Special tooling and test equipment and material costs may be included under Phase II. The inclusion of equipment and material will be carefully reviewed relative to need, cost and appropriateness for the work proposed.

The purchase of special tooling and test equipment must, in the opinion of the contracting officer, be advantageous to the Government and should be related directly to the specific effort. These may include such items as innovative instrumentation and/or automatic test equipment. Title to property furnished by the Government or acquired with Government funds will vest with the DoD Component, unless it is determined that negotiation of the transfer of title to the contractor would be more cost effective than retention of title to the equipment by the DoD Component. You are encouraged to discuss any questions that you have relative to the proposing of Special Tooling, Test Equipment and/or Material with your Phase I Contracting Officer.

(b) Travel

Proposed cost for travel must be justified and related to the needs of the project.

(c) Cost Sharing

Cost sharing is permitted; however, cost sharing is not required nor will it be an evaluation factor in the consideration of a proposal.

13. Company Commercialization Report. As instructed in paragraph 3.4n of the DoD Solicitation, prepare the report through the password-protected DoD Electronic Submission Web Site (<http://dodsbir.net/submission>). Once you have completed the Report on the Web Site, print out a hard copy, sign and date it, and include it with your proposal. This report lists the name of the awarding agency, date of award, contract number, topic or subtopic, title, and award amount for each Phase I and Phase II project, and commercialization status for each Phase II. All Phase II proposals must include a Company Commercialization Report. A Report showing that a firm has received no prior Phase II awards will not affect the firm's ability to obtain a Phase II award.

14. Submission - Submit In accordance with Section II herein, and any instructions provided with the letter requesting a Phase II proposal.

E. General Requirements

1. All Phase II research or research and development must be performed by the small business concern in the United States (as defined in the DoD Solicitation from which the Phase I was awarded).
2. As in Phase I, the primary employment of the principal investigator for Phase II must be with the small business firm at the time of the award and during the conduct of the proposed effort. (Primary employment means that more than one half of the principal investigator's time is spent with the small business, and precludes full-time employment at another organization.)
3. The proposing firm must perform a minimum of one-half of the research or analytical work. See IID10 above.

4. The small business must have the necessary systems (accounting/etc.) in place to receive the type contract contemplated by the Air Force. The failure to do so may result in your inability to receive a contract award. A Cost or Cost Plus Fixed Fee type contract will more than likely be designated. Additional help and information in this area may be found by clicking on the following hyperlink: <http://home.hiwaay.net/~bobsbir/dod/dodsbir.htm>.
5. Agencies are not permitted to issue SBIR contracts which include provision for subcontracting any portion of that contract back to the originating agency or any other Federal Government agency. (Reference SBIR Program Information Notice (SPIN) No. 97-01, 24 Feb 1997.)

F. Questions

Any questions regarding any requirements or instructions set forth herein should be directed to the Contracting Officer having cognizance of your Phase I award.

IV. METHOD OF SELECTION AND EVALUATION CRITERIA

A. Introduction

Phase II proposals will be evaluated on a competitive basis by knowledgeable scientists or engineers or other technical personnel. In the evaluation and handling of proposals, every effort will be made to protect the confidential information in the proposals and any evaluation. There is no commitment by the DoD to make any awards or to be responsible for any monies expended by the proposer before award of a contract. Submission of a Phase II proposal constitutes acceptance of the review process and the resulting evaluation.

B. Evaluation Criteria

The Phase II proposal will be reviewed and evaluated for overall merit based upon the criteria set forth below, which are listed in descending order of importance:

Phase II Evaluation Criteria

1. The soundness, technical merit, and innovation of the proposed approach and its incremental progress toward topic or subtopic solution.
2. The qualifications of the proposed principal/key investigators supporting staff and consultants. Qualifications include not only the ability to perform the research and development, but also the ability to commercialize the results.
3. The potential for commercial (government or private sector) application and the benefits expected to accrue from this commercialization.

A proposal's commercial potential will be assessed using the following criteria:

(a) The proposer's commercialization strategy (see Sections 3.4h and 3.6 of the DoD SBIR 00.1 Solicitation) and, as discussed in that strategy: (1) any commitments of additional investment in the technology during Phase II from the private sector, DoD prime contractors, non-SBIR/STTR DoD programs, or other resources, and (2) any phase III follow-on funding commitments; and

(b) The proposer's record of commercializing its prior SBIR and STTR projects, as shown in its Company Commercialization Report (see Section 3.4n of the Solicitation). If the "Commercialization Achievement Index" shown in the first page of the Report is at the 5th percentile or below, the proposer will receive no more than half of the evaluation points available under evaluation criterion 3. Above ("potential for commercialization"), unless the Air Force SBIR program manager recommends, in writing, that an exception be made for that proposer, and the contracting officer approves the exception.

A Company Commercialization Report showing that the proposing firm has no prior Phase II awards will not affect the firm's ability to win an award. Such a firm's proposal will be evaluated for commercial potential based on its commercialization strategy in item (a) above.

The reasonableness of the proposed costs of the effort to be performed will be examined to determine those proposals that offer the best value to the Government. Where technical evaluations are essentially equal in merit, cost to the DoD Component will be considered in determining the successful offeror(s). The right is reserved to include on-site evaluations of the Phase I effort by Government personnel in the review and determination of overall merit.

V. CONTRACTUAL CONSIDERATIONS

A. Awards

For proposals that have been selected for contract award, a Government contracting officer will draw up an appropriate contract to be signed by both parties before work begins. Any negotiations that may be necessary will be conducted between the offeror and the Government contracting officer. It should be noted that only a duly appointed contracting officer has the authority to enter into a contract on behalf of the US Government.

Final decisions on Phase II proposals will be made based upon the scientific and technical evaluations and other factors (as indicated above), the possible duplication with other research and development, program balance, budget limitations, and the potential of a successful Phase II effort leading to a product of continuing interest to DoD.

B. Reports

Copies of the final report for the Phase II project must be submitted to the DoD Component in accordance with the negotiated delivery schedule and any Contract Data Requirements List (CDRL) applicable or set forth in the award document. The final report will normally be due within 30 days after completion of the Phase II effort. The final report shall include a single-page project summary as the first page identifying the purpose of the work, a brief description of the work carried out, the finding or results, and potential applications of the effort, as further detailed in the award document. The summary may be published by the DOD and, therefore, must not contain proprietary or classified information. The balance of the report should indicate in detail the

project objectives, work carried out, results obtained, and estimates of technical feasibility. Monthly or quarterly progress reports, pursuant to other CDRL's, as required in negotiations, will indicate progress, schedule, and budgeting items.

C. Payment Schedule

Per the DoD SBIR Program Solicitation from which your Phase I award was made.

D. Technical Data, Copyrights, and Patents

Per the DoD SBIR Program Solicitation from which your Phase I award was made.

E. Markings of Proprietary or Classified Proposal Information

The Phase II proposal submission shall adhere to the procedures as described herein and as set forth in the DoD SBIR Program Solicitation from which your Phase I award was made.

F. Contractor Commitments

The items shown in the DoD SBIR Program Solicitation from which your Phase I contract was awarded are also applicable and may be included in a Phase II contract.

END OF WRIGHT RESEARCH SITE, AIR FORCE RESEARCH LABORATORY INSTRUCTIONS